DOCUMENT RESUME

ED 354 792 HE 026 017

| | |
|---|---|
| AUTHOR | Henderson, Cathy |
| TITLE | College Freshmen with Disabilities. A Statistical Profile. |
| INSTITUTION | American Council on Education, Washington, DC. HEATH Resource Center. |
| PUB DATE | 92 |
| CONTRACT | ACE-HO30C00001-91 |
| NOTE | 43p. |
| AVAILABLE FROM | HEATH Resource Center, Department FD, American Council on Education, One Dupont Circle, Washington, DC 20036 ($1C; $7.50 for multiple copies). |
| PUB TYPE | Reports - Descriptive (141) |
| EDRS PRICE | MF01/PC02 Plus Postage. |
| DESCRIPTORS | Career Choice; College Choice; *College Freshmen; College Students; Comparative Analysis; Degrees (Academic); *Disabilities; Family Characteristics; *Full Time Students; Hearing Impairments; Higher Education; Learning Disabilities; Physical Disabilities; Postsecondary Education; Research; Speech Handicaps; Statistical Data; *Student Attitudes; Trend Analysis; Visual Impairments |

ABSTRACT

This report contains national data on the change over time in the participation of students with disabilities in postsecondary education and reports on the 140,000 students with disabilities who are among the 1.6 million full-time, first-time freshmen attending more than 3,100 institutions of higher education in 1991. The report compares responses of freshmen with disabilities to those who did not report a disability. Among the numerous topics of comparison are personal and family background, high school preparation and articulation to college, college and career expectations, self-perceptions, and opinions. Differences between men and women with disabilities are compared, as are differences between students with particular kinds of disability with those reporting "other" or "no" disability. Among the findings, it is reported that, since the end of 1970, the percent of freshmen who report having a disability has tripled. Furthermore, the disabling conditions that are most prevalent today are more likely to be invisible (learning disabilities, health impairments, speech impairments, low vision, or loss of hearing) than obvious (deafness, orthopedic problems, blindness). In addition, freshmen with disabilities are reported to be more likely than their peers to have had remedial courses in high school and to anticipate needing them in college; this represents a decisive point for many disabled students in college choice. (GLR)

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# COLLEGE FRESHMEN WITH DISABILITIES:

## *A STATISTICAL PROFILE*

AMERICAN COUNCIL ON EDUCATION

HEATH RESOURCE CENTER

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# COLLEGE FRESHMEN WITH DISABILITIES

## *A STATISTICAL PROFILE*

by
Cathy Henderson

American Council on Education
HEATH Resource Center

**College Freshmen with Disabilities: A Statistical Profile** was prepared under Cooperative Agreement No. H030C00001-91, awarded to the American Council on Education. The contents do not necessarily reflect the views of the U.S. Government, nor does mention of products or organizations imply endorsement by the U.S. Government.

August 1992

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This publication was produced on Apple Macintosh computers, using Aldus PageMaker, Microsoft Word, and Cricket Graph software packages.

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## FOREWORD

For more than a decade, I have been involved in the issue of postsecondary education for students with disabilities. As an observer, participant, and advocate, I have witnessed great changes in thinking as well as action on American campuses by educators and administrators. Before the end of the 1970s, there were a handful of colleges and universities that could be identified as educating students with disabilities. There were several dedicated to deaf students, and a few that served students who use wheelchairs. As newer campuses were built, physical access ideas were often incorporated into buildings, and some campuses became accessible to students with a variety of disabilities. The students with disabilities who attended college 20 or 30 years ago frequently were recently disabled war veterans or highly motivated and exceptionally well-prepared students with lifelong disabilities. Those in nonspecialized colleges and universities most frequently were blind or functionally limited in mobility.

The civil rights movement of the 1960s extended into the 1970s to embrace advocates of people with disabilities – then called "handicapped." By 1973, the Rehabilitation Act was passed by Congress. It included Section 504, which prohibits recipients of federal funds from discriminating on the sole basis of handicap. Virtually all American colleges and universities receive some federal dollars and must comply with both that law and the subsequently issued 504 Regulations. The greatest increases in the enrollment rates of postsecondary students with disabilities can be traced to that time.

As **College Freshmen with Disabilities: A Statistical Profile** clearly shows, since the end of the 1970s, the percent of freshmen who report having a disability has tripled. Furthermore, the disabling conditions that are most prevalent today are more likely to be invisible (learning disabilities, health impairments, speech impairments, low vision, or loss of hearing) than obvious (deafness, orthopedic, blindness). Despite the fact that nearly 9 percent of freshmen report having disabilities, campus administrators tell us that only 1 to 3 percent of their students request any physical or programmatic accommodations. The profession of campus *disability support service provider (DSSP)* has grown over the past decade to meet the needs of this changing population.

The only measure available to document the change over time of the college population with disabilities is the annual survey, **American Freshman: National Norms,** which has included a question about disability status since 1978. Encouragement from ACE's Division of Policy Analysis and Research has helped to keep the disability question in the CIRP study on a regular basis.

**American Freshman: National Norms** reports data collected by the *Cooperative Institutional Research Program* (CIRP) in its national longitudinal study of the American higher education system. Established in 1966 at the American Council on Education, the CIRP is now the nation's largest and longest empirical study of higher education, involving data on some 1,300 institutions, over 7 million students, and more than 100,000 faculty. To maximize the use of these data in research and training, the CIRP was transferred to the Graduate School of Education at the University of California, Los Angeles (UCLA) in 1973. The annual CIRP freshman and follow-up surveys are now administered by the Higher Education Research Institute at UCLA, under the continuing sponsorship of the American Council on Education.

The *American Council on Education* (ACE) founded in 1918, is the major representative organization in higher education in the United States. An independent, nonprofit association, the Council represents all accredited, degree-granting institutions of higher education, as well as national and regional higher education associations. Through its programs and activities, and its policy-setting functions, it strives to ensure high quality education on the nation's campuses and equal educational opportunity for all American citizens.

Collection and publication of this data was made possible by the terms of the cooperative agreement between the American Council on Education and the U. S. Department of Education. With that support, HEATH purchased a special run of CIRP data that was based on the responses of the freshmen who reported having one or more disabilities. Cathy Henderson, who wrote this **Profile**, has brought extensive experience and clear thinking to the task. A former analyst for ACE's Division of Policy Analysis and Research and currently a consultant on higher education policy issues, Henderson has written numerous *Policy Briefs* and *Higher Education Panel Reports* for ACE. With guidance from the HEATH Advisory Board and staff, she selected the specific data addressed in this publication.

The data is rich and warrant study by disability support service personnel, student development officers, vocational rehabilitation counselors, specific disability advocates and educators, as well as students and their families.

Rhona C. Hartman,
*Director*, HEATH Resource Center

## SOURCES OF DATA

Anyone who wishes to enroll in college faces obstacles. Motivation of the individual and encouragement from family and friends are not enough to ensure success. Potential students also must meet the necessary academic requirements and be able to pay for the schooling desired. In addition, some people have disabilities that increase the physical, intellectual, social, and emotional challenges of entering college. This report describes students who have already achieved quite a lot; they were enrolled for the first time as full-time freshmen in the fall of 1991.

Since 1966, a large sample of college freshmen has participated in an annual national survey of college students. This survey is administered by the Cooperative Institutional Research Program (CIRP) and is cosponsored by the American Council on Education (ACE) and the Graduate School of Education of the University of California at Los Angeles (UCLA). The purpose of this survey is to provide a profile of first-time, full-time freshmen at the beginning of their college experiences. Sometimes follow-up surveys are administered to some of these same students to see how they are progressing through college or in their careers.

Typically, the survey of freshmen is administered in the early fall of each year and gathers data on students' personal backgrounds, high-school experiences, educational and career goals, and opinions. Survey responses are collected from a stratified sample of accredited institutions across the United States and are weighted to reflect the national cohort of freshmen for each specific year of the survey. For example, in 1991, questionnaires were tabulated from 210,740 students attending a cross section of 431 universities, four-year colleges, and two-year colleges. The responses were weighted to represent the national enrollment patterns of the total 1,606,215 first-time, full-time freshmen attending more than 3,100 institutions of higher education in 1991.

The CIRP provided the HEATH Resource Center with a special set of tabulations based on students' answers in the 1991 national study of freshmen to the following question in the 1991 study of freshmen: "*Do you have a disability?*"

This publication profiles those 1991 freshmen who indicated that they had a disability. When the responses were weighted to reflect the national cohort of entering freshmen across the United States, the survey

results indicated that there were 140,124 freshmen with disabilities. These 140,124 cases represent 8.8 percent of all first-time, full-time students in the fall of 1991.

The annual survey has asked the question concerning disabilities several times since 1978. (See Table 1.) Federal regulations implementing Section 504 of The Rehabilitation Act of 1973 went into effect in late 1977. Section 504 prohibits discrimination on the basis of handicap in all institutions that receive of federal funds; this includes nearly all colleges and universities. In 1978, the first year the survey included a question on disabilities, 2.6 percent of freshmen reported a disability. By 1991, the percentage of freshmen reporting any type of disability had more than tripled, to 8.8 percent. (Part of this difference may be due to the phrasing of the question: in 1978, the question read, *"Do you have a physical handicap? If so, what type?"*

Since 1985, the percentage of students citing learning disabilities has grown the fastest, increasing from about 15 percent to 25 percent of all disabled students. (See Table 2.)

**CIRP Study Question**

**Do You Have a Disability?**
(Mark *all* that apply.)

- None
- Hearing
- Speech
- Orthopedic
- Learning disability
- Health-related
- Partially sighted or blind
- Other

***Since 1985, the percentage of students citing learning disabilities has grown the fastest, increasing from about 15 percent to 25 percent of all disabled students.***

Table 1.
**Percentage of Full-Time Freshmen Reporting Disabilities: Selected Years**

| Disability | 1978 | 1985 | 1988 | 1991 |
|---|---|---|---|---|
| Hearing | NR | 0.9 | 0.8 | 0.9 |
| Speech | NR | 0.3 | 0.3 | 0.5 |
| Orthopedic | NR | 0.9 | 1.0 | 1.2 |
| Learning disability | NR | 1.1 | 1.2 | 2.2 |
| Health-related | NR | 1.2 | 1.2 | 1.3 |
| Partially sighted or blind | NR | 2.1 | 1.9 | 2.2 |
| Other | NR | 1.2 | 1.4 | 1.6 |
| Total | 2.6 | 7.4 | 7.0 | 8.8 |

*Source*: HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.
*Note:* NR= no response. NRs in 1978 are due to phrasing of the question: "Do you have a physical handicap? If so, what type?" In 1985,1988, and 1991, the question was, "Do you have a disability? Mark *all* that apply."

Table 2.
**Types of Disabilities of Full-Time Freshmen, by Percentage: Selected Years**

| Disability | 1985 | 1988 | 1991 |
|---|---|---|---|
| Hearing | 12.2 | 11.6 | 10.5 |
| Speech | 4.0 | 3.8 | 5.4 |
| Orthopedic | 12.1 | 13.8 | 13.5 |
| Learning disabled | 14.8 | 15.3 | 24.9 |
| Health-related | 16.2 | 15.7 | 14.6 |
| Partially sighted or blind | 28.3 | 31.7 | 25.2 |
| Other | 16.2 | 18.5 | 18.3 |

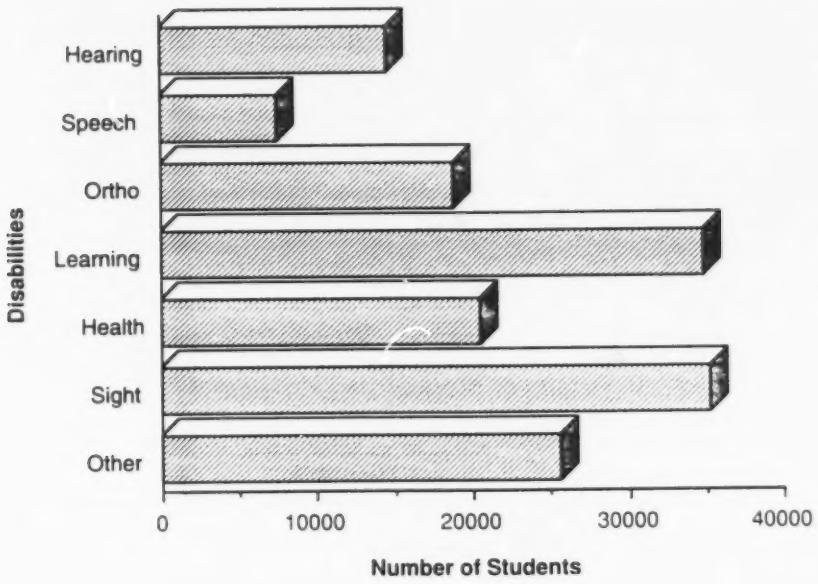
For example, in 1991,10.5% of students with disabilities reported a hearing impairment.

*Source*: HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.
*Note*: Data from 1978 are omitted because they are not comparable to the data in later years. In 1985-91, the detail may sum to more than 100.0 percent because of multiple disabilities.

## HIGHLIGHTS OF 1991 FRESHMEN SURVEY

Sight and learning disabilities were the two disabilities most frequently identified by students in the 1991 survey. (See Figure 1, Table 3.) The frequency of disabilities also varied by the category of institution attended. Disabilities involving sight were most often listed by freshmen at universities, four-year colleges, and historically Black colleges and universities (HBCUs). On the other hand, students at two-year colleges were most likely to report learning disabilities.

Figure 1.
**Full-Time Freshmen with Disabilities: 1991**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

**Table 3.**
**Disabilities Reported by Full-Time Freshmen by Type of Institution: 1991**

| Disability | Universities and Four-Year Colleges | Two-Year Colleges | HBCU* | Total |
|---|---|---|---|---|
| Hearing | 8,142 | 6,093 | 445 | 14,680 |
| Speech | 3,208 | 3,971 | 320 | 7,499 |
| Orthopedic | 9,461 | 9,021 | 445 | 18,927 |
| Learning | 13,794 | 20,664 | 462 | 34,920 |
| Health related | 11,259 | 8,110 | 1,131 | 20,500 |
| Partially sighted or blind | 23,241 | 10,366 | 1,650 | 35,257 |
| Other | 14,227 | 10,477 | 940 | 25,644 |

* historically black colleges and universities

*Source:* HEATH Resource Center, ACE. Basced on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.
*Note*: This table shows the distribution of 157,427 disabilities reported by 140,124 freshmen. The detail will sum to more than the total because multiple responses were permitted. For example, students with both orthopedic and speech disabilities would be counted on both lines.

***Sight and learning disabilities were the two disabilities most frequently identified by students in the 1991 survey.***

The following sections examine how two groups of 1991 freshmen at all institutions, those who reported disabilities and those who did not, compared on a wide range of descriptors: personal and family background, high school performance, preparation for college, college and career expectations, self-perceptions, and opinions. A later section compares women and men with disabilities, and a final section profiles freshmen by specific type of disability. (For many characteristics, there were no substantial differences between students with disabilities and those who reported none. Therefore, a single number, such as 4 percent, or two numbers, such as 3–4 percent, may be used to describe both groups. If two numbers, such as 3–4 percent, are used, the first number refers to students with disabilities and the second relates to other students.)

## Personal and Family Background

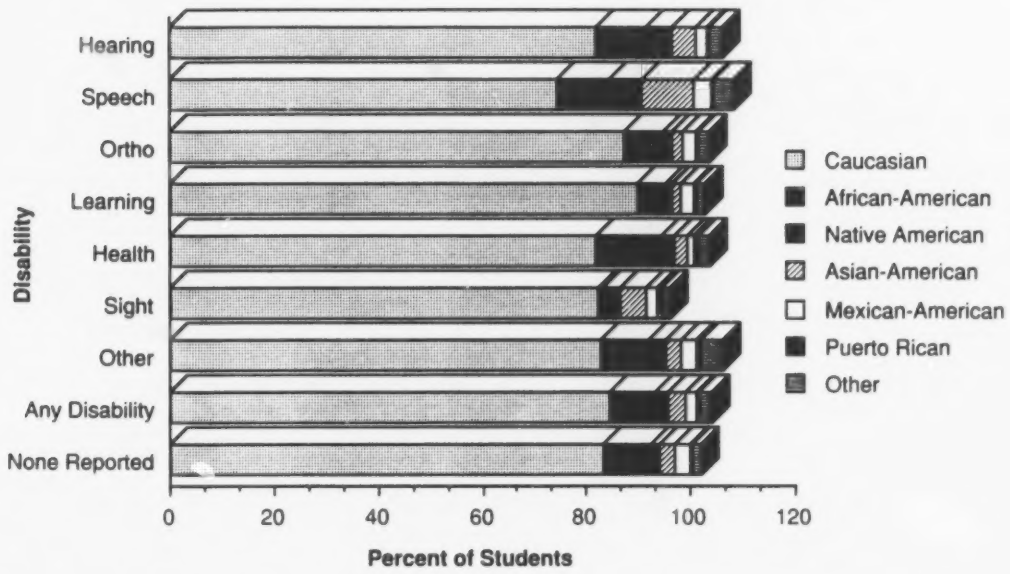
There were more similarities than differences in the personal and family characteristics of disabled and other students. Minority students accounted for 16–17 percent of both groups. (See Figure 2.) The proportions of minority freshmen were quite similar regardless of the disability status of the students: African-American, 9 percent; Asian-American, 3 percent; Mexican-American, 2–3 percent; Native American, 3–1 percent; and Puerto Rican, 1 percent. Nearly all students, regardless of their disability status, were U.S. citizens (98 percent), native English speakers (95 percent), and not twins (98 percent). About 70 percent of each group stated that their parents were living together, while 24 percent classified their parents as divorced or separated. Approximately 6 percent of each group had parents who were deceased.

The educational level of the parents was also parallel. For each group, about two-fifths of mothers and fathers had completed high school and at least one-fifth were college graduates. Likewise, the careers of parents were similar for the disabled and other student groups. The three most frequently cited occupations listed for the students' mothers were full-time homemaker (15 percent), professional business employee (13–14 percent), and clerical worker (9–10 percent). Fathers were concentrated in the same two lines of employment: business management (27–26 percent) and skilled worker (9–11 percent).

Two striking differences pertained to the sex and age of the freshmen. First, disabled students were more likely than other students to be male (52 percent vs. 46 percent). (See Figure 3.) And second, although the median age of both groups of students averaged 18 years, there were more older disabled freshmen. About 13 percent of those with disabilities, but only 7 percent of other students, were entering college at age 20 or above. (See Figure 4.)

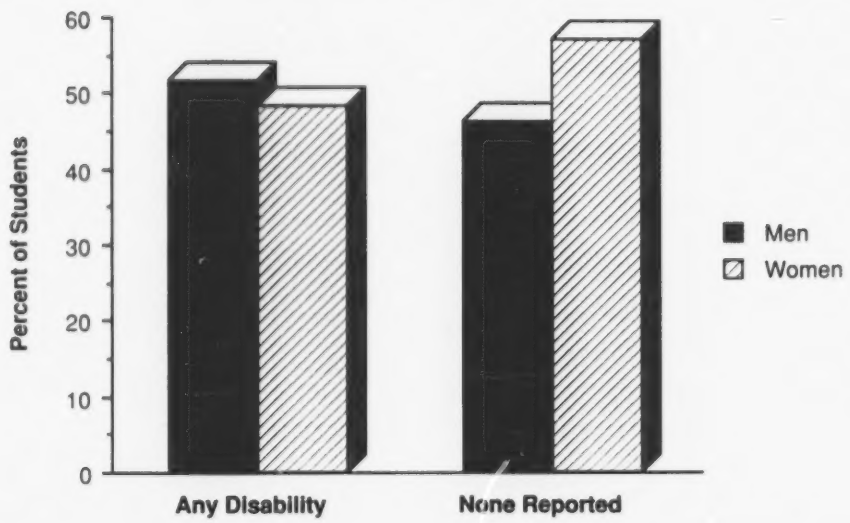
Parental income appears comparable if only the medians are examined. The median of $41,238 for disabled students is fairly close to the median of $43,740 for nondisabled students. However, disabled freshmen were more likely to come from lower-income families; 21 percent of disabled, but only 17 percent of other students' families, earned less than $20,000 per year in 1991. (See Figure 5.)

Figure 2.
**Full-time Freshmen With Disabilities by Race/Ethnicity: 1991**



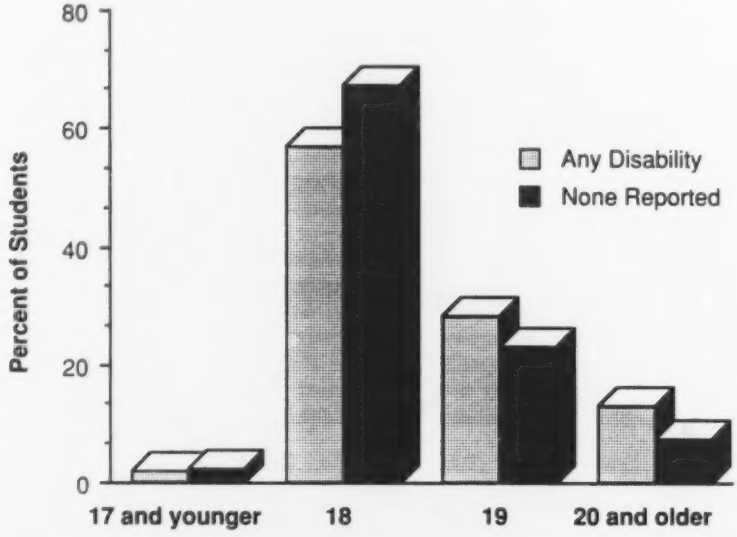

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992

Figure 3.
**Differences between Men and Women by Disability Status: 1991 Full-time Freshmen**



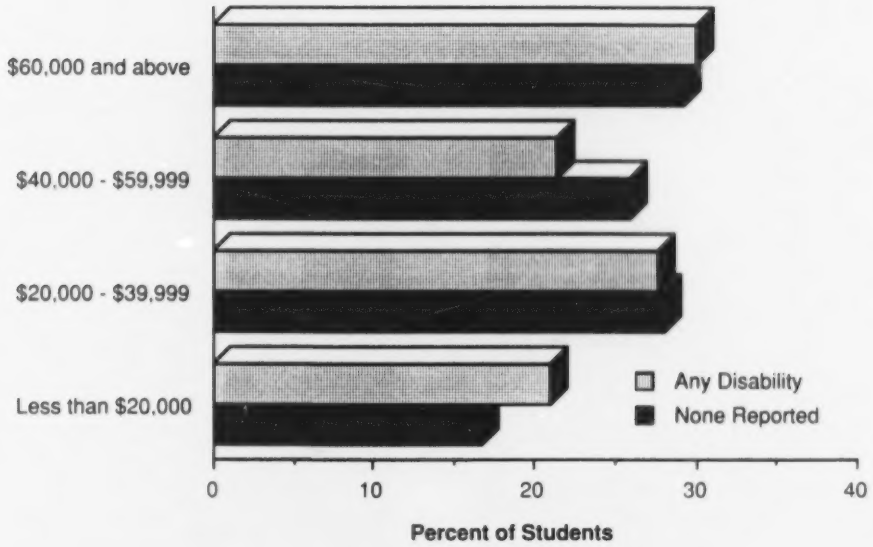

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 4.
**Full-time Freshmen by Age: 1991**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 5.
**Parental Income of Full-time Freshmen: 1991**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

## High School Preparation and Articulation to College

Disabled and nondisabled students had many common experiences during their high school years. Most had attended public high schools (85–86 percent) while the remaining (14–15 percent) had graduated from private secondary schools. About two in five freshmen from both groups had averaged at least six hours of homework per week.

However, disabled students had demonstrated a different level of academic performance during their high school years. (See Figure 6.) A smaller share of disabled students than other students had earned A averages (17 percent vs. 24 percent), and a larger proportion had received C and D averages (29 percent vs. 19 percent). Likewise, disabled freshmen were less likely to have been elected to a scholastic honor society (20 percent vs. 28 percent. (See Figure 7.) Disabled students were more likely to have asked their high school teachers for advice (24 percent vs. 18 percent) and to have taken remedial work in courses such as mathematics (17 percent vs. 11 percent), English (13 percent vs. 6 percent), reading (12 percent vs. 6 percent), science (8 percent vs. 5 percent), foreign languages (7 percent vs. 4 percent), and social studies (7 percent vs. 4 percent). (See Figures 8 and 9.)

Typically, disabled freshmen had been out of high school longer than other students. Only 88 percent of the disabled, but 92 percent of other students, had both graduated from high school and enrolled in college during the calendar year 1991. Few students (4–3 percent) had accumulated any prior credits from earlier courses taken at their colleges. For both types of freshmen, 72–74 percent were attending the college that had been their first choice. Disabled students, however, were less likely than their peers to have applied to more than one institution (59 percent vs. 63 percent).

The decision to attend college is usually a three-step process. First, people consider the idea to enroll, then they select a small list of institutions in which they are interested, and finally they choose one that has selected them. When the freshmen students were asked to list important factors that influenced their decisions to attend college, the answers were generally similar. The top three reasons for students with disabilities versus other students, respectively, were: to get a better job (78–79 percent), to learn more about things (76–73 percent), and to make more money (72–75 percent). However, three other reasons seemed more important to disabled than nondisabled freshmen: the desire to improve

reading/study skills (42 percent vs. 37 percent), the wish to leave home (19 percent vs. 15 percent), and difficulty finding a job (10 percent vs. 7 percent). (See Figure 10.)

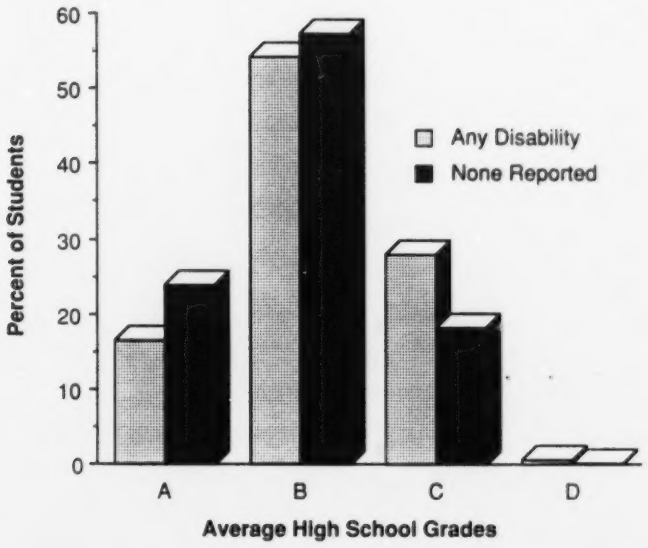
When asked specifically why they chose their *particular* colleges, both groups of students gave similar responses: the college's good academic reputation (51 percent), the prospect of a good job after graduation (43–44 percent), and the size of the college (37–35 percent). However, special programs offered by colleges were more significant to freshmen with disabilities than to other freshmen (31 percent vs. 21 percent). Also, advice from guidance counselors (12 percent vs. 8 percent) and relatives (12 percent vs. 9 percent) seemed more important to freshmen with disabilities than to their peers. (See Figure 11.)

***Special programs offered by colleges were more significant to freshmen with disabilities than to other freshmen.***

There was no important difference in the average distance from the students' homes to their colleges. Almost half (46 percent) of each group traveled 50 miles or less to enroll. (See Figure 12.) Likewise, the majority of each group of students (59–60 percent) expected to reside in college dormitories in the fall of 1991. Another 27–29 percent planned to live with parents or other relatives. (See Figure 13.)

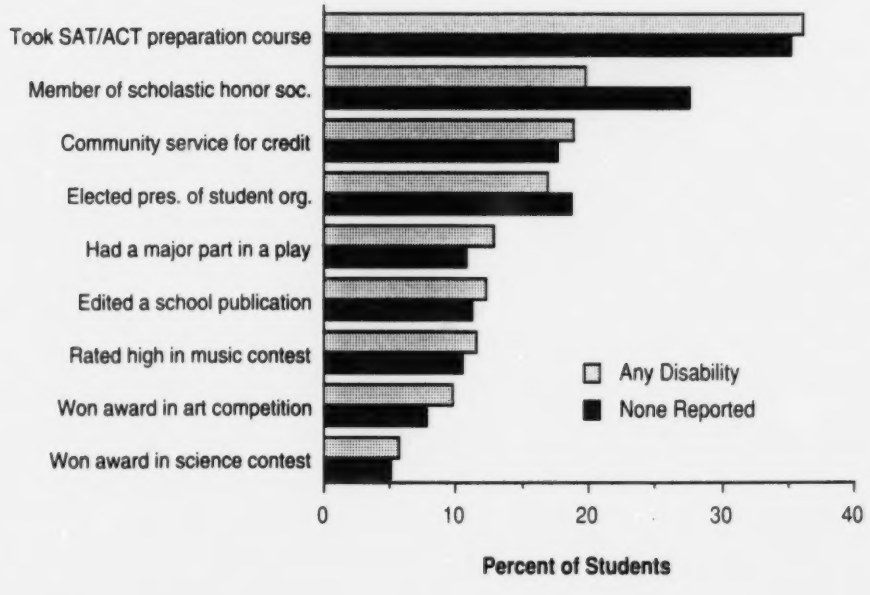
Because a higher share of disabled students came from lower-income families (below $20,000), it is not surprising to discover that disabled students were less likely to have received financial assistance from their parents or families (73 percent vs. 77 percent). In addition, a smaller share of disabled students were able to contribute savings accumulated from previous summer work toward college expenses (46 percent vs. 50 percent). In general, both types of students were as likely to have received help from the major federal aid programs: Pell Grants (24–23 percent), Stafford/Guaranteed Student Loans (21–22 percent), College Work-Study subsidies (12–11 percent), Supplemental Educational Opportunity Grants (8–6 percent), and Perkins loans (7 percent). Both groups had similar tendencies to use private grants (9 percent) or institutionally financed college loans (6–5 percent). Disabled students received slightly fewer college-based grants (20 percent vs. 23 percent). (See Figure 14.)

Figure 6.
**Average High School Grades of Full-time College Freshmen: 1991**



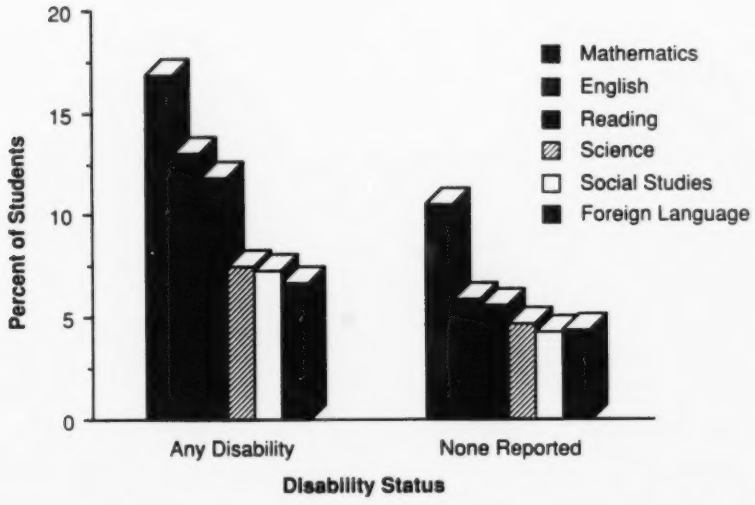

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 7.
**High School Activities of Full-time College Freshmen: 1991**



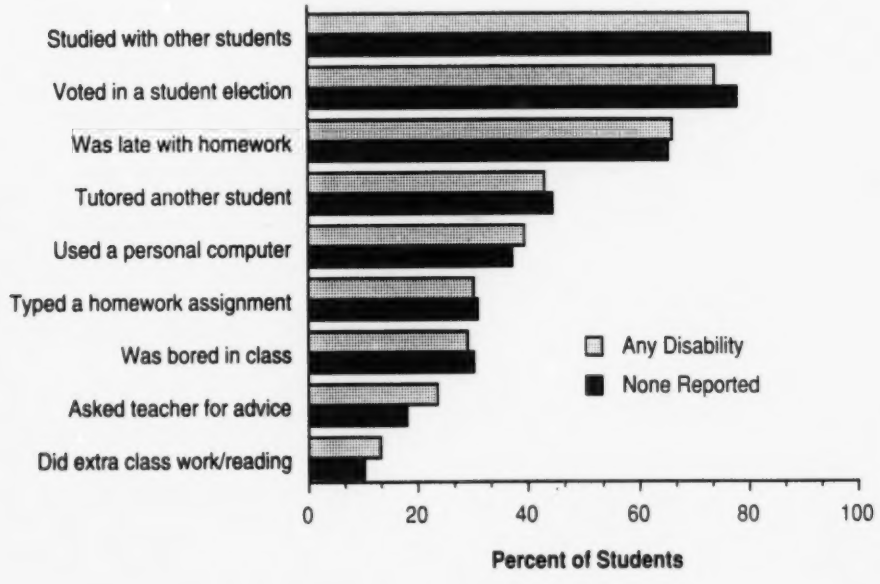

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 8.
**Full-time Freshmen Who Had Special Tutoring or Remedial Work in High School: 1991**



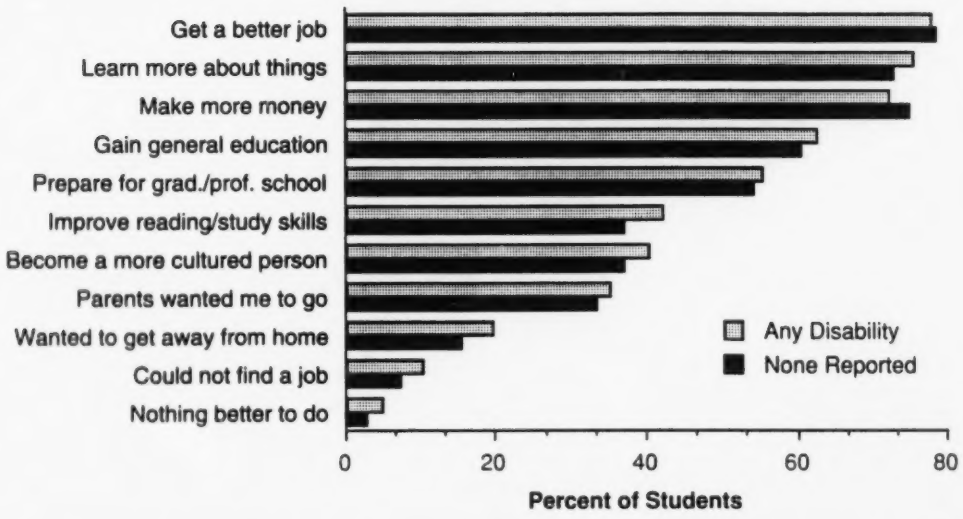

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 9.
**Activities of Full-Time Freshmen During the Past Year: 1991**



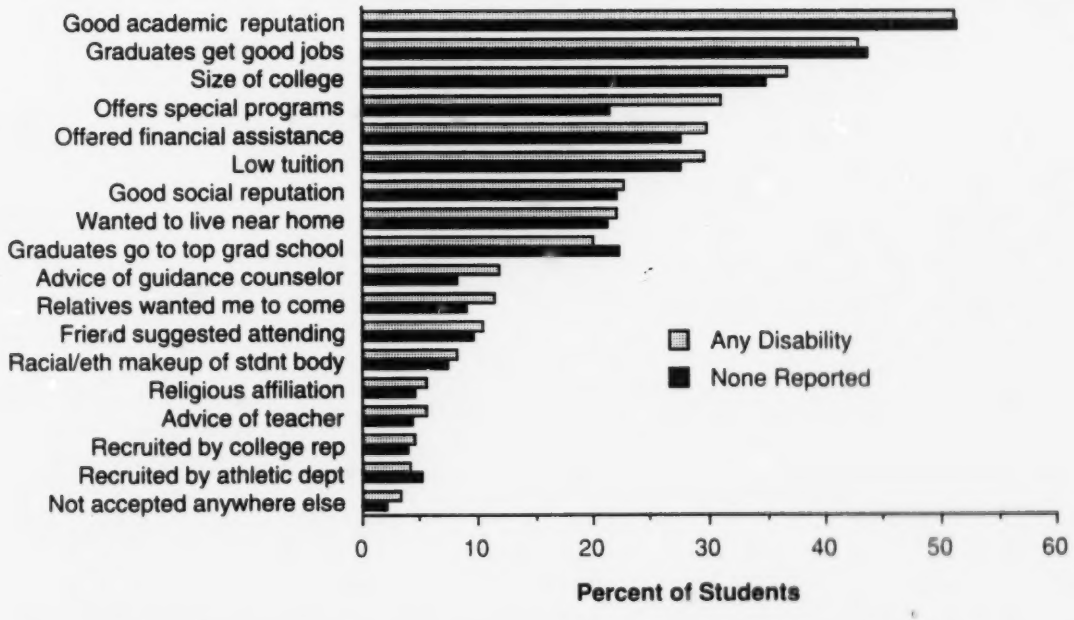

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 10.
**Reasons Cited by Full-Time Freshmen as Very Important in Deciding to go to College: 1991**



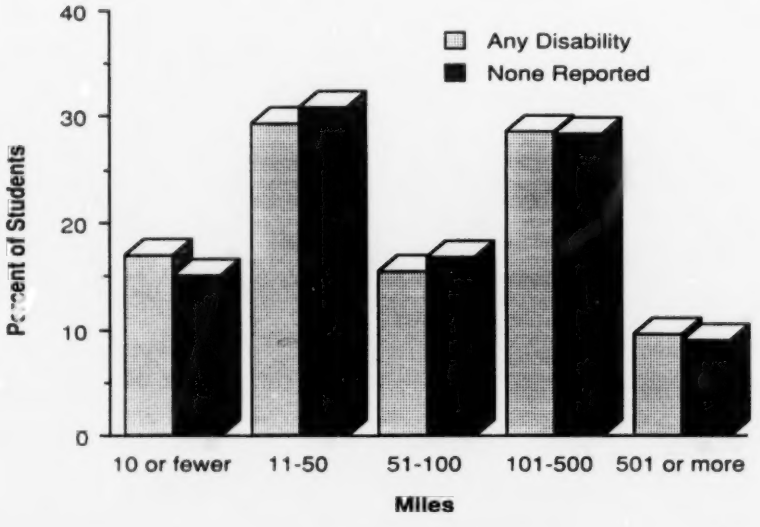

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 11.
**Reasons Cited by Full-Time Freshmen as Very Important in Selecting This College: 1991**



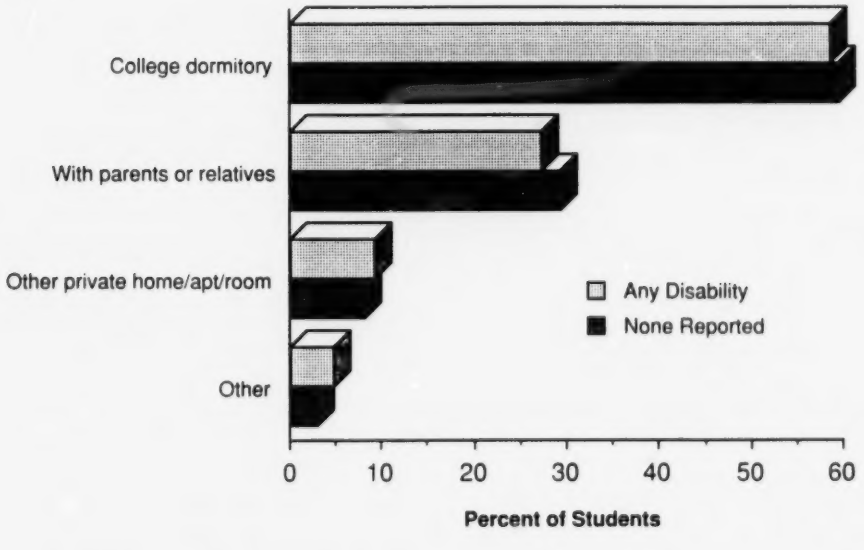

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 12.
**Miles Traveled by Full-Time Freshmen to Attend College: 1991**



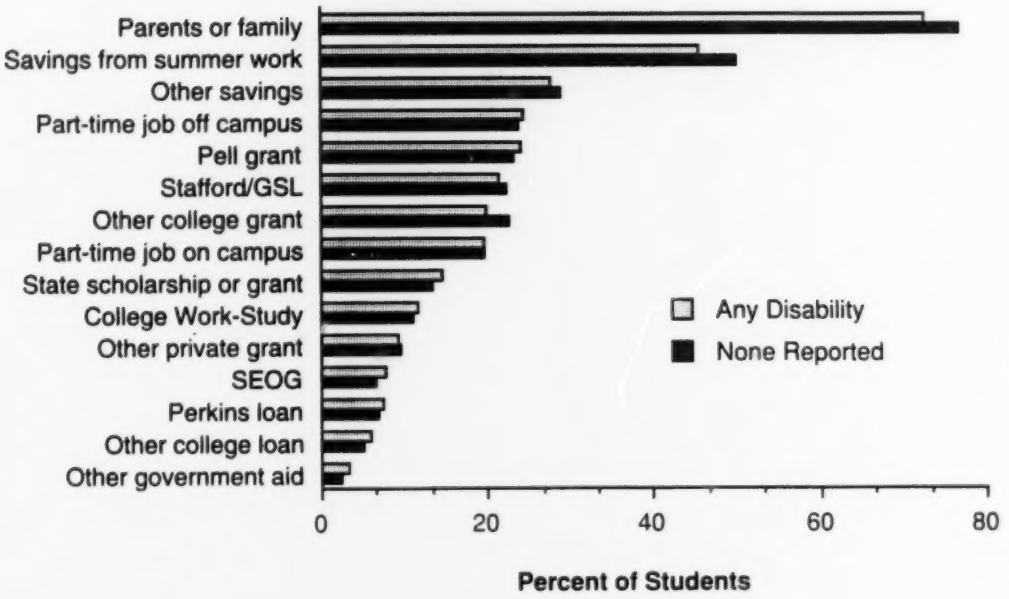

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 13.
**Planned Residence of Full-time Freshmen: 1991**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 14.
**Financial Support for College Expenses of Full-Time Freshmen: 1991**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

## College and Career Expectations

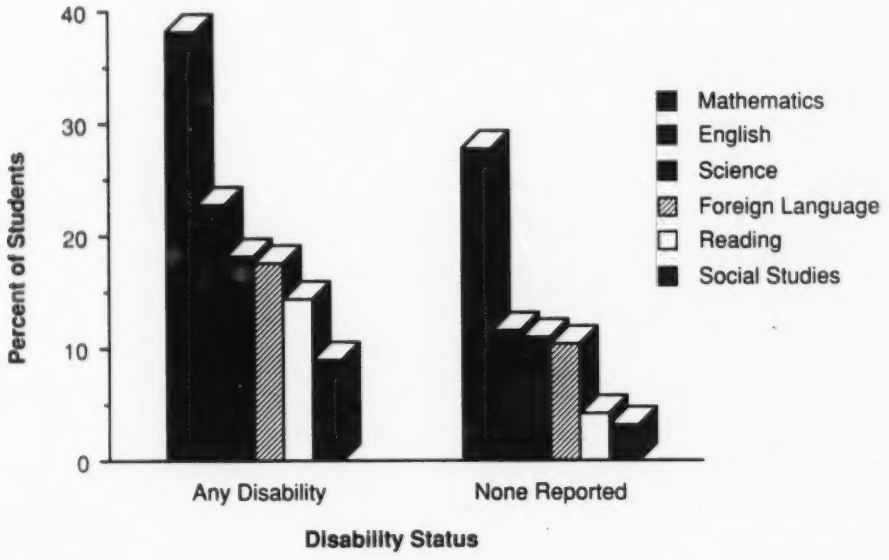
Freshmen survey respondents were asked to describe their educational and career goals, including their expected major field of study while in college, their highest expected degree, and their preferred occupation. Disabled students predicted that they would need special tutoring or remedial work in some subjects more frequently than nondisabled students would (24 percent vs. 14 percent). Help was expected in specific courses for disabled versus other students in the following areas: mathematics (38 percent vs. 28 percent), English (23 percent vs. 12 percent), science (18 percent vs. 11 percent), foreign languages (18 percent vs. 11 percent), reading (14 percent vs. 4 percent), and social studies (9 percent vs. 3 percent). (See Figure 15.)

Across most major fields of study, disabled and other students expressed similar expectations. (See Figure 16.) However, in two groups of disciplines the groups varied. Disabled students did not expect to become business majors at the same rate as their colleagues who reported no disabilities (15 percent vs. 19 percent), and disabled students were more interested in technical fields (7 percent vs. 4 percent).

In general, more disabled than other students predicted that they would need extra time to complete their educational goals (12 percent vs. 8 percent). About one in three students from both groups hoped to finish a master's degree. (See Figure 17.) Disabled students were more likely to expect to complete associate (9 percent vs. 7 percent) and Ph.D./Ed.D. (14 percent vs. 12 percent) degrees than were other students. Students who did not identify any disabilities were a little more likely to guess that they would complete a baccalaureate degree (28 percent) as their highest academic award, compared with their peers with disabilities (26 percent). Both groups expressed about the same amount of interest in professional degrees (13 percent). (This category includes medicine, law, divinity, and other professional fields.)

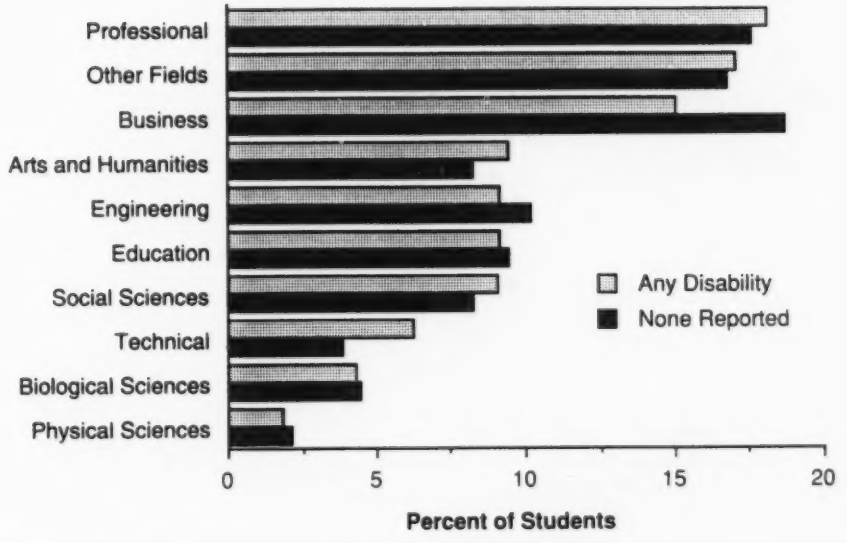
A long list of possible occupations (more than 40) was presented to the freshmen. Generally, although the popularity of careers was parallel, a smaller proportion of disabled students expected to enter each of the most popular occupations. (See Figure 18.) Overall, at least two-thirds of both groups predicted that they would be successful in finding a job in their chosen career. (See Figure 19.) However, disabled freshmen were slightly less optimistic (68 percent vs. 71 percent).

**Figure 15.**
**Full-time Freshmen Who Anticipate Needing Special Tutoring or Remedial Work in College: 1991**



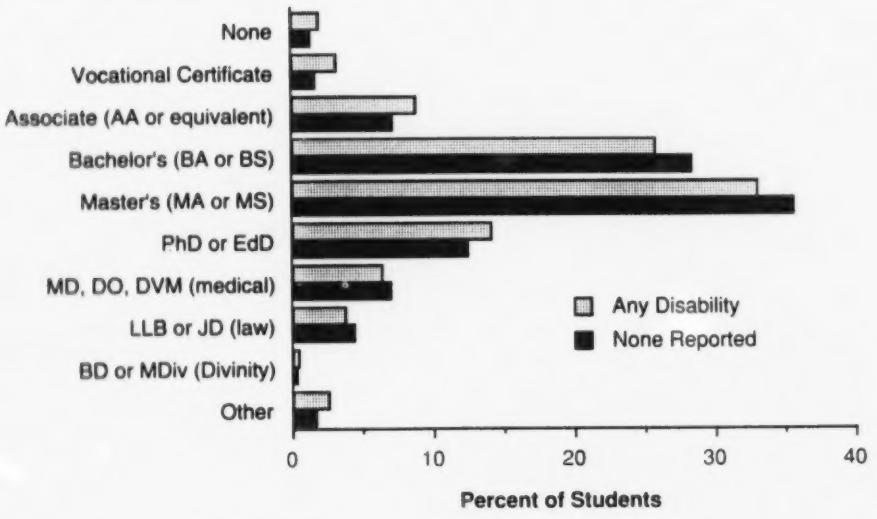

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

**Figure 16.**
**Major Field of Study Predicted by Full-time Freshmen: 1991**



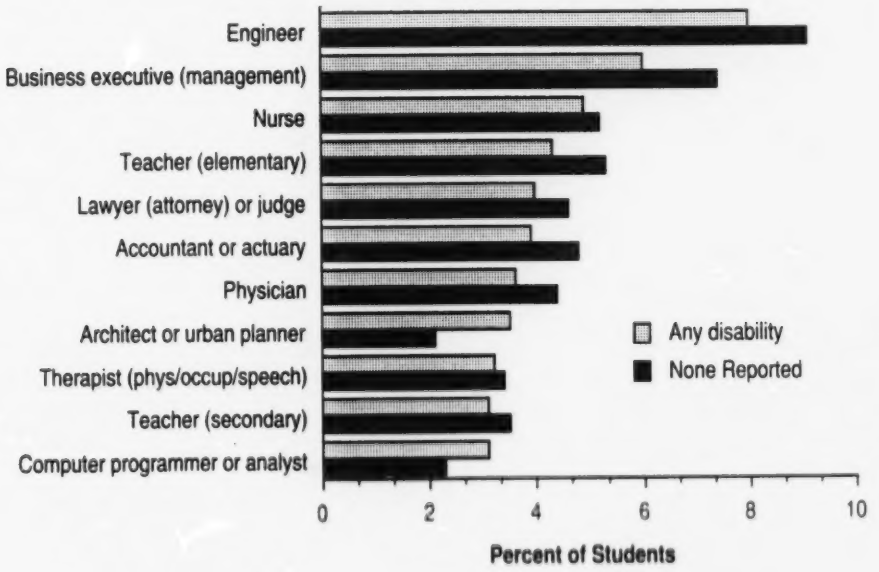

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 17.
**Highest Earned Degree Predicted by Full-time Freshmen: 1991**



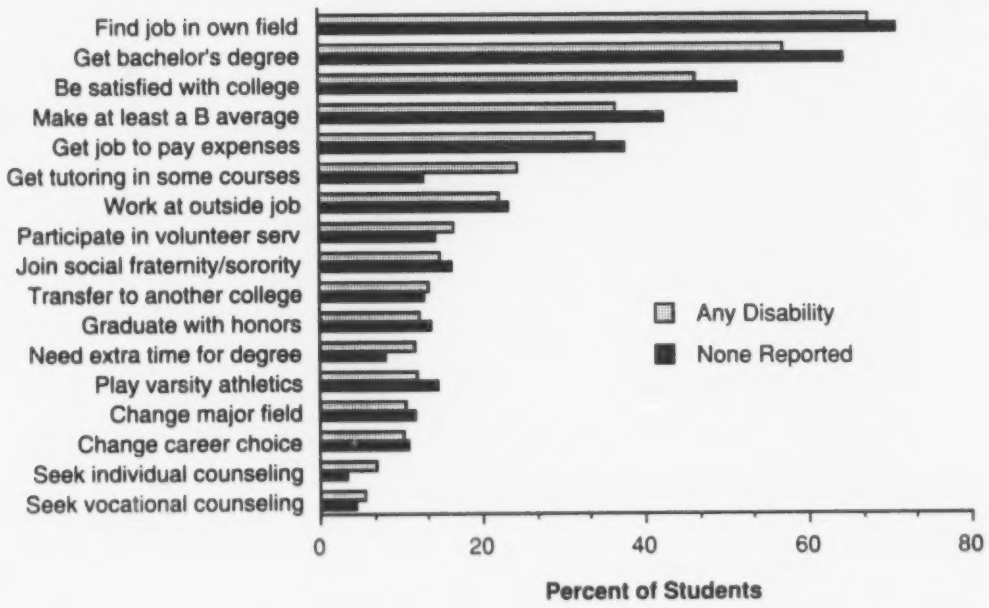

*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

**Figure 18.**
**Popular Probable Careers of Full-time Freshmen: 1991**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

**Figure 19.**
**Selected Predictions Made by Full-time Freshmen: 1991**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

## Self-Perceptions

As was stated earlier, students who completed this questionnaire had already achieved one measure of educational success: they had enrolled as first-time, full-time college students.

A certain level of intellectual, social, and emotional maturity is necessary for each of these students to have accomplished this step. In addition, successful completion of educational and career goals may be tied to students' perceptions about their strengths and shortcomings.

One series of questions asked the students to compare themselves with average persons who were of similar ages. About two-thirds of the students, with and without disabilities, considered themselves to be "above average or in the top 10 percent of all people" on the following two measures: the ability to cooperate with others, and the ability to be understanding of others. (See Figure 20.)

However, on most of these self-rated comparisons, a smaller share of disabled students ranked themselves at this high a level on different measures of ability, compared with other college students. For example, a smaller share of disabled freshmen, compared with other students, rated themselves as "above average or in the top 10 percent of people" on the following measures of self-esteem: emotional health (48 percent vs. 57 percent), popularity (36 percent vs. 41 percent), intellectual self-confidence (46 percent vs. 52 percent), and social self-confidence (41 percent vs. 46 percent).

When asked to evaluate their academic strengths, again a smaller share of disabled students rated themselves as "above average or in the top 10 percent," compared with other students, on: overall academic ability (44 percent vs. 53 percent), writing ability (38 percent vs. 40 percent), reading speed/comprehension (31 percent vs. 37 percent), and mathematical ability (31 percent vs. 37 percent). Likewise, when asked to evaluate their physical health relative to others, a smaller share of disabled students than other students saw themselves in the highest group (46 percent vs. 58 percent).

However, on two ability measures, artistic and mechanical, a larger share of students with disabilities rated themselves high, relative to how nondisabled students saw themselves. The percentages for disabled/nondisabled students who rated themselves as "above average or in the top 10 percent" on artistic ability were 29 percent vs. 24 percent; and for mechanical ability they were 30 percent vs. 27 percent.

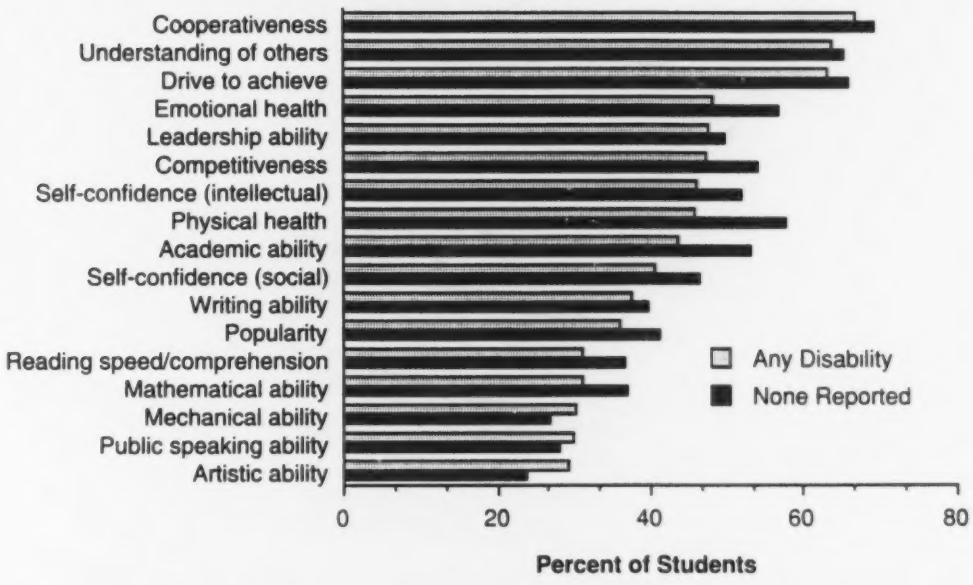
## Opinions

The freshmen surveys serve as annual barometers of the attitudes and political opinions of college students. At least half of both groups of freshmen (see Figure 21) thought the following life objectives were very important: to become an authority in one's field (67–68 percent), to help others in difficulty (60 percent), and to obtain recognition from colleagues (53 percent). Disabled students were more concerned than others about certain civic issues, including cleaning up the environment (36 percent vs. 31 percent), promoting racial understanding (36 percent vs. 34 percent), and participating in community action programs (27 percent vs. 23 percent).

Disabled students appeared to measure success differently than nondisabled students. Although a higher proportion of disabled students thought it was important to be successful in one's own business (46 percent vs. 42 percent), fewer were driven by the desire to be well off financially (70 percent vs. 74 percent). Disabled students were more interested in developing a philosophy of life (47 percent vs. 43 percent) and in artistic accomplishments, such as creating artistic works (16 percent vs. 11 percent), writing original works (17 percent vs. 12 percent), and achieving recognition in a performing art (12 percent vs. 10 percent).

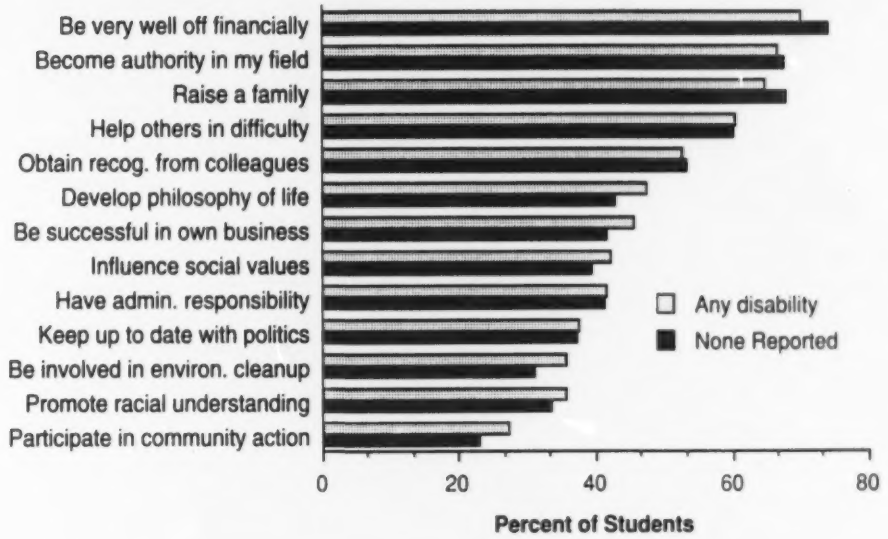
Generally, the results of the 1991 survey did not reveal important distinctions in the political opinions expressed by students based on their disability status. For example, the majority of students (at least three in four in both groups) felt that the federal government is not doing enough to control environmental pollution (85 percent), that the federal government could do more to control handguns (76–78 percent), and that national health care is needed (77–76 percent).

Figure 20.
**Full-time Freshmen Who Felt They Were Above Average in Ability Ratings: 1991**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

Figure 21.
**Selected Objectives Considered To Be Very Important by Full-time Freshmen: 1991**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

## DIFFERENCES BETWEEN MEN AND WOMEN WITH DISABILITIES: 1991 FULL-TIME FRESHMEN

For many questions in the freshman survey, women with disabilities had more in common with nondisabled women than they did with men who reported disabilities. For example, women (regardless of their disability status) were more likely than men to have the following characteristics in common: to be older, to be members of a minority group, to have a single parent, to have earned better high school grades, to choose a college closer to home, to come from a lower-income family, and to receive federal financial student assistance.

When only the disabled freshmen were considered, there were also important differences between men and women. First, the types of disabilities reported varied. (See Table 4.) Women were more likely to have listed sight and health-related problems, while men reported higher instances of learning and speech disabilities.

**Table 4**
**Differences Between Men and Women with Disabilities by Type of Disability: 1991 Full-time Freshmen**

| Type of Disability | Women | Men |
|---|---|---|
| Hearing | 10.1% | 10.8%* |
| Speech | 3.5% | 7.1% |
| Orthopedic | 13.5% | 13.5% |
| Learning disability | 22.2% | 27.4% |
| Health-related | 17.7% | 11.8% |
| Partially sighted or blind | 27.3% | 23.1% |
| Other | 17.8% | 18.8% |

*For example, 10.8 percent of men with disabilities reported a hearing impairment.

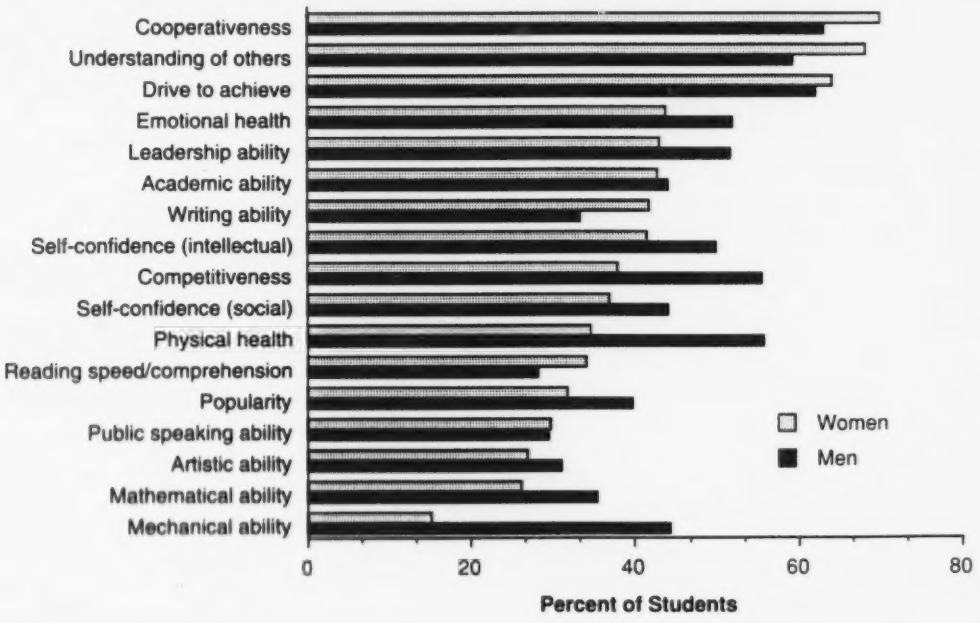
*Source*: HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

It has been shown that students with disabilities participated in special tutoring and remedial classes at higher rates than their peers. The type of remedial assistance also varied by the sex of the disabled student. For example, men with disabilities were more likely to have taken in high

school (and to need in college) remedial courses in English and reading while a larger proportion of women with disabilities thought they would need more help in mathematics and science courses. In the process of choosing a college, more women than men (with disabilities) were influenced by the size of the college and the availability of special programs and financial assistance.

On measures of emotional stability and competence, a smaller proportion of women than men, regardless of their disability status, rated themselves above average. Among freshmen with disabilities, women were more likely than men to report that they often felt depressed or overwhelmed and that they expected to seek individual counseling. Likewise, fewer women than men with disabilities thought they ranked above average on many measures of emotional and social skills. (See Figure 22.) However, a higher percentage of women than men (with disabilities) considered themselves above average in understanding and cooperation, in ambition to achieve, and in writing and reading skills.

Figure 22.
**Differences Between Men and Women With Disabilities Who Felt They Were Above Average in Ability Ratings: 1991 Full-time Freshmen**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

## HIGHLIGHTS OF FULL-TIME FRESHMEN BY TYPE OF DISABILITY: 1991

Up to this point, students reporting all disabilities have been described. The resulting profile shows that students with disabilities are generally more similar to their non-disabled peers than different from them in terms of personal and family background, high school preparation and articulation to college, self perceptions, and aspirations. Interesting differences among disabilities become evident when one analyzes the responses of students with different disabilities. Students with each type of disability, as well as those who teach, advise, or administer postsecondary support services for them, may be especially interested in the following section.

### Partial Sight or Blindness

One-fourth of disabled freshmen reported that they were partially sighted or blind. Almost two-thirds of these freshmen (66 percent) attended four-year institutions; the remaining students enrolled in two-year schools (29 percent) HBCUs (5 percent).

On average, students with sight disabilities were more likely than other students (regardless of their disability status) to have had an A average in high school and to have been a member of a high school scholastic honor society. Among college freshmen with disabilities, students who were partially sighted or blind were the least likely to anticipate needing special tutoring or remedial work in college. Students who were partially sighted or blind were the most likely to rate themselves above average or higher on measures of academic and mathematical abilities and emotional health. Finally, freshmen who had limited vision were the least likely among disabled students to list multiple disabilities. (See Table 5.)

### Learning Disability

Among freshmen with disabilities, one in four listed a learning disability. Almost three-fifths (59 percent) of these students attended two-year campuses while another two-fifths (40 percent) were enrolled at universities and four-year colleges. Only 1 percent were enrolled at HBCUs.

Among freshmen with disabilities, learning disabled students were the most likely to be from Caucasian families and to have parents with upper incomes ($100,000 and above) and graduate degrees. They were most likely to have had C and D averages in high school, to have had remedial work in high school, and to expect to need additional tutoring in

college. However, compared to other students with disabilities, freshmen with learning disabilities were more likely to have earned their high school diploma within six months of starting college and less likely to have received a high school equivalency certificate, rather than a diploma. Freshmen with learning disabilities were just as likely as other students with disabilities to aspire to earn a graduate or professional degree; one in two hoped to achieve this goal.

As a group, freshmen with learning disabilities were the least likely to rank themselves above average or higher in measures of academic and mathematical abilities, public speaking, writing, or intellectual self-confidence. Yet they were the group most likely to be interested in creating artistic works. The special programs offered by colleges were particularly important to freshmen with learning disabilities. Almost one in two agreed that the special programs were a primary reason why they had chosen their colleges.

A smaller proportion of learning-disabled students, compared with their peers with disabilities, received any form of federal student assistance. Relative to other students with disabilities, a smaller percentage of learning disabled freshmen had been employed prior to college. Likewise, fewer intended to work while enrolled in college.

## Health-Related Disability

Approximately one in seven students listing a disability described it as "health-related." These students may have conditions such as severe allergies, cystic fibrosis, epilepsy, cancer, lupus, multiple sclerosis, or other health-related problems. Just over half (55 percent) of these freshmen were enrolled in four-year institutions while 40 percent attended two-year colleges. Five percent were enrolled in HBCUs. (See Figure 23.)

A higher proportion of freshmen with health-related disabilities were women compared with other groups of disabled students or with the freshmen population as a whole. In general, freshmen with health-related disabilities were the most likely to have tutored other students in high school, to project that they would earn B averages while in college, and to believe that they would be successful finding jobs in their chosen fields.

## Orthopedic Disability

Almost one in seven students answered the survey question on disabilities by stating that they had an orthopedic condition. Except for 2 percent who attended HBCUs, freshmen with orthopedic disabilities were almost evenly divided between two- and four-year institutions.

Students with orthopedic disabilities tended to be older than other disabled or non-disabled students. In addition, they were most likely to have finished high school several years before entering college or to have passed the GED high school equivalency test. Compared to all types of freshmen, more freshmen with orthopedic conditions were attending colleges which they described as their "first choice." They were the least likely to have had any remedial work in high school and the most likely of any group of freshmen to rank themselves above average or higher in leadership traits and in public speaking ability.

## Hearing Disability

About one in ten freshmen with disabilities described their disability as a hearing impairment. Slightly over half (56 percent) of these students were enrolled in four-year colleges, 42 percent attended two-year colleges, and 3 percent were found at HBCUs.

A higher percentage of freshmen with hearing disabilities than other students (regardless of disability status) were from lower-income families (under $20,000). Compared with other groups of students, students with hearing disabilities were twice as interested in the field of nursing.

Hearing-impaired freshmen ranked themselves higher than other types of freshmen (with or without disabilities) on the measure of artistic ability. They ranked themselves as highly as students reporting no disabilities on the following measures of abilities: writing, mathematical, mechanical, leadership, and understanding of others. Likewise, students with hearing impairments expected to be just as satisfied with college and to find a job in their chosen career at the same rate as their peers without disabilities.

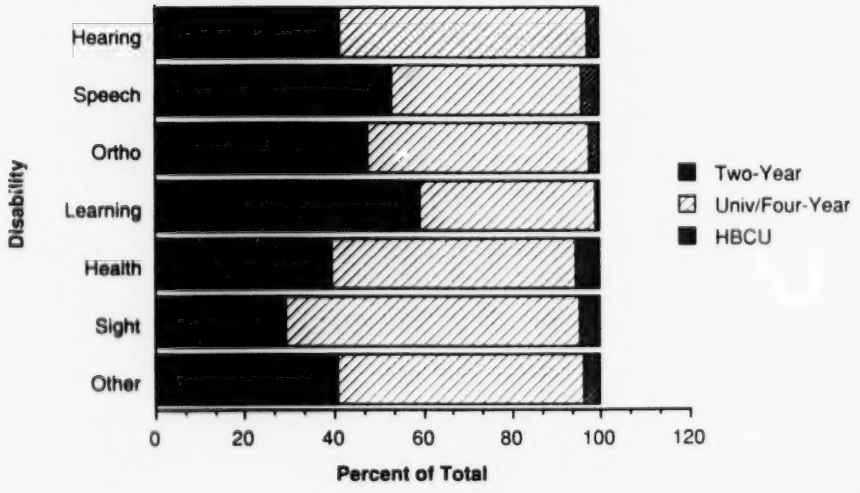
## Speech Disability

Relatively few freshmen with disabilities (1 in 20) stated that they had a disability involving speech. Just over half (53 percent) of the students were at two-year colleges, while 43 percent and 4 percent attended four-year colleges and HBCUs, respectively.

Compared to any group of freshmen, those with speech impairments were the most likely to be male and to be minority members. As a group, they were the least likely to be U.S. citizens or to be native English speakers. Students with speech disabilities were the most likely to list additional disabilities. (See Table 5.)

Parents of freshmen with speech disabilities had completed fewer years of schooling, compared with parents of other disabled freshmen. Students with speech impairments were more likely to live with parents or family, to enroll in a college close to home (within 10 miles), and to have worked at least 16 hours a week before beginning college. More of these students, compared other college students, said that difficulty in finding a job influenced their decision to enroll in college. The educational aspirations of these students were mixed; they were the most likely of the disabled freshmen to desire a vocational certificate or associate degree, and yet other students with speech disabilities were the most likely to desire to be engineers. Relative to their peers elsewhere, students with speech impairments rated themselves less capable on measures of leadership and understanding of others but higher on mechanical ability.

Figure 23
**Distribution of Full-Time Freshmen With Disabilities, by Type of Disability and Type of Institution: 1991**




*Source:* HEATH Resource Center, ACE. Based on unpublished data from the 1991 Cooperative Institutional Research Program, UCLA, 1992.

**Table 5.**
**Percent of Full-Time Freshman with Multiple Disabilities, by Type of Disability: 1991**

| Disability | Hearing | Speech | Ortho-pedic | Learning | Health-Related | Partial Sight/ Blindness | Other | Total |
|---|---|---|---|---|---|---|---|---|
| Hearing | 100.0 | 18.4 | 5.0 | 4.4 | 5.0 | 4.0 | 3.4 | 10.5* |
| Speech | 9.4 | 100.0 | 7.1 | 4.1 | 2.1 | 1.5 | 1.9 | 5.4 |
| Orthopedic | 6.5 | 18.0 | 100.0 | 2.6 | 8.2 | 2.5 | 4.0 | 13.5 |
| Learning Disability | 10.5 | 19.2 | 4.7 | 100.0 | 7.8 | 3.2 | 5.6 | 24.9 |
| Health-Related | 7.0 | 5.8 | 8.9 | 4.6 | 100.0 | 3.8 | 5.2 | 14.6 |
| Partially Sight or Blindness | 9.6 | 7.1 | 4.6 | 3.2 | 6.6 | 100.0 | 3.2 | 25.2 |
| Other | 6.0 | 6.5 | 5.4 | 4.1 | 6.5 | 2.3 | 100.0 | 18.3 |

*This column illustrates how many students had each type of disability. For example, 10.5 of all full-time freshmen with disabilities reported a hearing impairment.

*Note*: Details in columns will total to more than 100 because multiple responses were permitted. For example, 9.4 of students who said they had a hearing disability also had a speech impairment.

*Source*: HEATH Resource Center, ACE. Based on unpublished data from the Cooperative Institutional Research Program, UCLA, 1992.

## SUMMARY

Almost 1 in 11 of all full-time freshmen (8.8 percent) enrolled in college in 1991 reported a disability — a considerable change since 1978, when the proportion was about 1 in 38 freshmen, or 2.6 percent. Among students with disabilities, those reporting a learning disability are the fastest growing group.

Generally, freshmen with disabilities were more likely than their peers to have had remedial courses in high school and to anticipate needing them in college. Yet the educational and career goals of students with disabilities were generally similar to those without disabilities. Freshmen with disabilities did, however, expect to need additional time to complete their educational goals. The special programs offered through colleges appeared to be important recruiting devices in helping students with disabilities decide among particular colleges to attend.

When asked to rate their own talents, a smaller share of students with disabilities, compared with other students, ranked themselves above average or higher on a wide range of abilities. Finally, the majority of students, with and without disabilities, expected to be satisfied with their college experiences and to be successful in finding a job in a career of their choice.

## HEATH RESOURCE CENTER
## National Clearinghouse on Postsecondary Education for Individuals with Disabilities

The HEATH Resource Center is a clearinghouse that operates under a congressional legislative mandate to collect and disseminate information nationally about disability issues in postsecondary education. Funding from the United States Department of Education enables the Center to increase the flow of information about educational support services, policies, and procedures related to educating or training people with disabilities after they have left high school.

The HEATH Resource Center is designed to:

- identify and describe educational and training opportunities;
- promote accommodations that enable full participation by people with disabilities in regular, as well as specialized, postsecondary programs; and
- recommend strategies that encourage participation in the least restrictive and most productive environment possible for each individual.

To accomplish these goals, HEATH has an extensive publication program, a toll-free telephone service, and a professional staff that participates in a strong network of colleagues across the country.

**Information from HEATH** is a newsletter published three times a year and distributed nationally, free of charge, to subscribers. The newsletter highlights campus programs, provides information about new or pending legislation, and offers reviews of new publications and other media products. HEATH resource papers, monographs, guides, and directories focus on disability-related issues as they emerge on college campuses or in vocational-technical training schools, adult education programs, independent living centers, and other community-based training programs. Single copies of HEATH publications are free and may be reproduced. Most are available by request on audiocassette tape or computer disk.

HEATH's constituency comprises postsecondary administrators and service providers, teachers and instructors, high school and vocational rehabilitation counselors, government officials, librarians, health professionals, journalists, as well as those with disabilities and their families.

The toll-free telephone line is available to encourage direct interaction with HEATH staff.

Participation by HEATH staff in national, regional, and statewide conferences and training workshops has led to the development of a network of professionals across the nation. This network enables staff to suggest speakers, access options, audiovisual materials, and other resources to enhance such meetings.

HEATH staff can be reached Monday-Friday, 9 a.m.-5 p.m. Eastern Time at (800) 544-3284; or, in the Washington, DC metropolitan area, at (202) 939-9320; both lines are available for Voice or TT calls. Inquiries may also be mailed to HEATH at One Dupont Circle, Suite 800, Washington, DC 20036. Inquiries will receive prompt attention.

HEATH Resource Center is a program of the
American Council on Education.

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## ACKNOWLEDGMENTS

The HEATH Resource Center wants to pay special tribute to the individuals who gave their time and energy to the development of this project.

This report was written by Cathy Henderson. Charles Andersen provided invaluable assistance in the editing of this publication. Mario Payne and Dottie Jones assisted with the manuscript preparation. Wendy Bresler prepared the manuscript for production. The report was designed by Candy Rogers. Jack Caldwell oversaw the publishing.

AMERICAN COUNCIL ON EDUCATION
MCMXVIII

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Date Filmed
July 12, 1993